

From Theory to Practice

An Introduction to Artificial Intelligence (AI) in Education

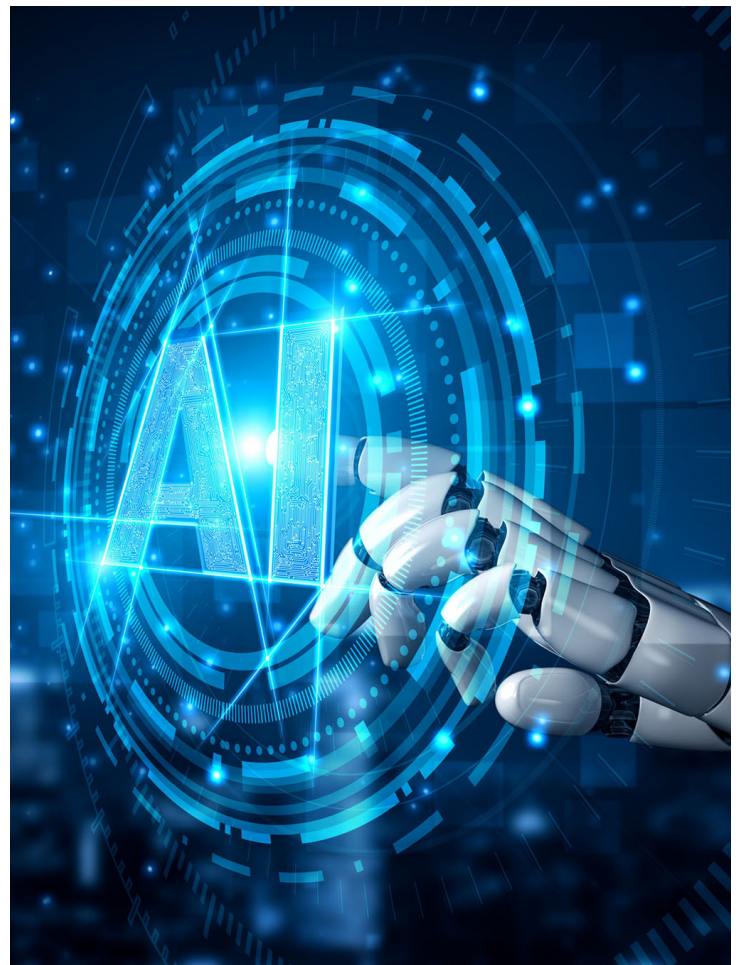
By Pilar Bravo, Leader of Academic Innovation and Curricula

Even though such machines might do some things as well as we do them, or perhaps even better, they would inevitably fail in others, which would reveal they were acting not through understanding, but only from the disposition of their organs.

René Descartes, 1637

Artificial Intelligence (AI) is revolutionizing all human activity exponentially. Its advances are so fast that we are having a hard time catching up with them. A large amount of news is released everyday about how AI has been used to improve processes in medicine, communication, banking, entertainment, space exploration, etc. Education, of course, is not the exception. The following is a brief introduction to what AI is, how it has woven itself in our lives and how it can influence education.

AI can be defined as the simulation of human intelligence, originally designed by human beings, and thought to behave as human beings, or even better than we do. AI can be used in almost all human activity to do impressively effective problem-solving, decision-making and communication. And, although many of its applications are still being developed, the ultimate purpose of AI is to increase aspects such as productivity, accuracy, engagement, coverage and agility in processes, products, and services.



From theory to Practice

But first, let's establish a definition of general intelligence that might help us understand AI better. Intelligence can be defined as the "rate at which a learner turns its experience and priors into new skills at valuable tasks that involve uncertainty and adaptation." (Chollet, 2019). And by learners, as you can all infer, we mean not only human beings and other animals, but also machines and systems. AI enables systems to use just a small amount of experience, information or algorithms and work autonomously to guess an outcome or perform in a certain way in different situations.

For better reference, a few examples of the application of AI in our daily life are:

- ✓ voice assistants like Alexa, Bixby or Siri
- ✓ chatbots
- ✓ face detection
- ✓ gaming (Image enhancement, game level generation, performance, scenarios and stories, balancing in-game complexity)
- ✓ text editors or autocorrect
- ✓ navigation or map apps
- ✓ online shopping apps
- ✓ health care applications
- ✓ self-driving cars
- ✓ 3D printing

AI is also considered one of the main drivers fueling the Fourth Industrial Revolution and among many other things, it is aimed at facilitating education in teaching and learning. According to the UNESCO, AI has the potential to address some of the biggest challenges in education today and innovate teaching and learning practices. Also, it can accelerate progress towards SDG 4, or the [fourth sustainable development goal](#), namely, Quality Education -ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all.

The COVID-19 pandemic and the consequent, inevitable and abrupt transition to online learning exposed significant gaps in educational systems and justice around

the world. They also proved the need for more advanced and accessible technology-assisted learning.

AI can offer different solutions to the aforementioned gaps, injustice, lack of coverage and need for innovation if incorporated wisely. Let us see some examples of its current and potential applications:

- ✓ Adaptiveness of platforms and platform contents to personalize learning by offering focused practice.
- ✓ Adaptive placement exams that offer more reliable results and agile administration.
- ✓ Virtual tutors, which have the potential to provide students and teachers anywhere, with analytics on their learning and offer interactive foreign language training, helping students to enhance their reading, speaking, and writing skills (Pinkwart & Liu, 2020).
- ✓ Virtual tours around world cities, museums and other landmarks with high-quality, realistic images, video, interaction, and feedback.
- ✓ Facilitating some administrative and operational tasks for the teacher so that they can focus more on humanizing education. AI software systems can take care of checking the homework, grading tests, creating, and feeding reports, creating visual material like presentations, among others.
- ✓ Speech recognition technology that can be programmed to listen to learners and provide feedback accordingly.
- ✓ Smart content creation helps teachers generate innovative content for more engaging and effective learning experiences. It stimulates the real-life experience of visualized web-based study environments, where students can perceive information in more than one way. It also facilitates digital lesson generation that automates the

creation of bit-size learning materials and other lessons in digital format. (Gupta, 2022)

"The role that data and artificial intelligence (AI) can play to benefit students and teachers in their learning and teaching journey is game-changing. By applying advanced learning analytics and extracting data-driven insights into student behaviors, needs, and skills, children's learning potential can be unlocked, and the operational efficiency of the educational institutions enhanced."

-Pierre-Adrien Hanania

The Human Educator and AI

And just to lessen our fears, experts agree that there is no actual replacement for a human educator who masters the art of teaching and has the wisdom to make instructional decisions with the data that AI might be able to provide. Furthermore, teachers have the potential to offer education that goes beyond just learning a foreign language; education that fosters values and principles, life skills and humanity; education that actually makes a difference because it's inspirational, meaningful, and coherent; education that is motivated by human role models.

"... teachers today have the most relevant role in history, making sense of information in abundance, promoting creativity, logical and critical thinking so that learning is meaningful, and it is possible to train students who are empowered by technology and not easily superseded and replaced by it. Then, they are not only necessary, but fundamental in light of artificial intelligence."

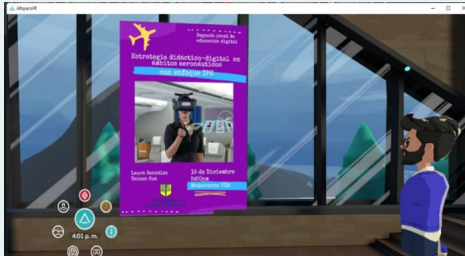
-Martha Patricia Castellanos

Teacher Voice

New Technologies are here to Stay

By Yeison Sua and Laura Gonzalez - Colombo Teachers

Being students of the master's in digital Didactics has helped us understand that education will be increasingly digitalized and more and more autonomous. And although digitalization is a strong component in the master's degree, it is a term that goes much further. These days, education faces exciting new challenges such as the metaverse and ChatGPT. Have you used or heard of them? I'm pretty sure



the answer is mostly no. We never even imagined using them. However, artificial intelligence should help us rethink the teaching-learning process of our students.

Our first presentation in the metaverse happened last December. We presented our thesis proposal behind a screen with avatars that we created ourselves but using our real voices. It was a unique experience where we came to the conclusion that the metaverse translates into the possibility of creating new learning spaces without barriers. Currently, we are developing an online tool that incorporates the metaverse where students will be able to practice all their language skills through an artificial stage connected to reality.



These new technologies are here to stay and one thing we are sure of is that their prohibition or avoidance is not the solution. Let's take the bull by the horns, teachers! And let's educate ourselves in the latest advances and methodologies in digital teaching in Colombia and around the world.

Self.Bot

By Angie Fonseca - Colombo Teacher and supervisor

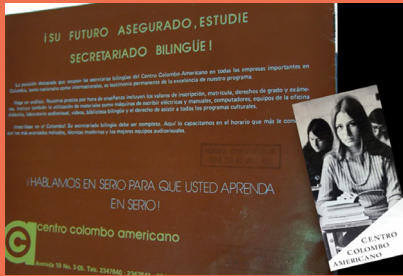
Pesonen, J.A. (2021) defines a chatbot as a computer program designed to stimulate conversation and provide information or assistance to a user as part of an automated service. Thanks to the technification and automation of digital marketing, as well as the optimization of virtual assistants through Artificial intelligence (AI), most of the population would have already had some type of interaction with a chatbot. Social media platforms such as Facebook, WhatsApp, and Instagram use chatbots to provide technical support or instant answers to frequently asked questions to their users.

However, "Self.Bot" is not an artificially intelligent one. It might be better described as a rule-based chatbot, which means it relies on pre-programmed rules and responses to simulate a conversation with a user. This tool was the result of my research-innovation process for my master's degree, which aimed to redefine chatbots beyond the context of e-commerce and digital marketing and instead, as educational tools that could help automate learning practices and study habits in EFL students. The fact that Self.Bot is linked to an instant messaging site such as WhatsApp makes

it an accessible and familiar practice tool for English students of any age who are already accustomed to this instant messaging application.



Did you know...?



During the 70's and 80's, the Colombo used to offer **bilingual secretarial courses and courses on North American Civilization**, which were considered an important breakthrough, since we started to be seen as more than just a place to learn English. Nowadays, through mediation activities, curricular adaptations, webinars, workshops, clubs, art exhibits, concerts, festivals and many other events, we promote art and cultural appreciation, reading habits, the development of employability, life and global skills, socioemotional learning, leadership and entrepreneurship, among many other. All this, because we believe the transforming power of bilingualism is so strong it takes us far beyond just speaking a foreign language. It opens doors, inspires, broadens horizons and breaks down barriers.

What's hot in ELT?

Esports in ESL

By Alejandro Ramírez – MakerSpace Mediator



First, it is important to know that esports is the short name for “electronics sports”, meaning video games that can be played competitively, either individually or as a team. This idea of competing has existed since classic video games. Years ago, we had people playing Space Invaders to beat the high score. Arcades were places where heroes could be made, and records were broken. When PC gaming became popular, people began to play against strangers. This launched the era of international icons, teams, and players that could claim to be the best in the world.

Now let's look at some prime examples of esports. One of these is League of Legends, this game was released formally in 2009 and competitions involving it have been organized around the world. In these games, players have to work together in order to accomplish some objectives and combat other teams.

These video games are incredible scenarios to incorporate esports in ESL/EFL. Educators can use these competitions to encourage the development of skills that go beyond just language and communication. While it is true esports create the need for players to use English to assist each other and express themselves coherently to successfully win tournaments, the learning experience seems to be a lot richer. Students will be motivated to do purposeful problem solving, inventiveness, collaboration, and creative decision-making.

What else is news?

The Colombo is Diversity in Inclusion and Opportunities

By Yennifer Lombana – Alumni Mediator



The Colombo is diversity in inclusion and opportunities. That is the reason why this year we are celebrating the launching of the “English to Fly” program. An initiative that seeks to provide diverse people such as visually impaired with the possibility of learning a foreign language like English. It will contribute

to our efforts to promote inclusion in different educational, professional, and cultural contexts. “English to Fly” will benefit 25 visually impaired people (blind or low irreversible vision) whose ages range from 18 to 35. With the alliance of Fundación CRAC (Centro de Rehabilitación para Adultos Ciegos), these people will get a B1 level and will broaden their professional horizons in the 5th Colombo bilingual fair. Ultimately, “English to fly” will allow participants to open their wings widely and fly to scenarios they have never been to.



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Three Tips on How NOT to Teach Poetry

By Robinson Rodríguez – Library and Alumni Mediator

Ofentimes teachers encounter the predicament of not knowing what to do in their classes. This happens for several reasons; lack of motivation, inspiration or creativity, boredom, and the list goes on. And teachers end up recycling activities and ideas, which is an audacious work-around for the problem. Poetry is, in fact, NOT the solution. Needless to say, this is a far cry from a recommendation, even less a suggestion. You must follow this nonsensical gibberish, otherwise you will see lively classrooms full students who love reading, creating and that know how to properly use words such as surreptitious, idyllic, or loquacious.



TIP 3 Standardized evaluation

What are we, if not numbers? A ritualized practice that has been around for centuries. It's definitely easy to say you are a 3 or a 4. There is virtually no reason for us to change that. This convoluted practice is tangled up in every fiber of our education system. Let's leave it like that. No one in their right mind would appreciate melody, a good rhyme, a good idea, etc. A tight checklist would suffice. It is not worth talking to students, nurturing their strengths while leaving room for improvement on their weaknesses.

This is a team effort. This must be accomplished through hard, non-stopping hours of control and tight-built structures, such as the ones developed in our educational systems. These tribulations label and influence our decisions to become lazy-minders and lose our engagement to do the right thing. What else can we ask for?

Follow these tips or pseudo missives for they are meant to create the perfect, nonchalant, sad scenario where not a poem will ever be written.

TIP 1 Having the right mindset

It is unmistakably a key element. Teachers must remain dogmatic and peremptory. There is no such a thing as easy poetry; it is an endeavor reserved for the elite and for academic people. Imagine students fully committed to expressing ideas they never dare to utter in front of a person or being aware of their surroundings while developing a critical mindset. The horror!

TIP 2 The proper approach

There is but one approach to teaching poetry: line by line, stanza by stanza, from left to right, A-B, C-B, A-B, A-B. Memorize Merriam Webster's Rhyming dictionary and you will be one step closer to your first poem. Do not fall for those heretics that proclaim a DIY scaffolding backward approach. It is a mind trick to make you book mediations. Your students will never enjoy this.

General ELT Notes References

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33 Years of Service with a Heart of Gold



This month we are saying goodbye to a beautiful and kind smile. María Consuelo Mantilla Boada, alias “Consu” or “Consuelito” has joined many of our journeys at the Colombo. Consu has been part of the Colombo family for 33 years and 11 months and this March 2023, she is retiring officially.



Consuelito arrived at our institution with the interest of belonging to the program that aimed at, at that time, training bilingual secretaries. With her charisma and unique way of relating to people, she ended up working as the EducationUSA Assistant. After that, she has also worked as the Academic Director Assistant and as the Teacher Professional Development Assistant.

Throughout all these years and the different roles Consu has had, she has demonstrated passion for what she does and genuine care for people. She has been a shoulder to cry on, but also a friend to celebrate with. And no matter what, she has always had an encouraging word to light us up.

The Colombo is immensely thankful to Consu, but she’s also grateful to our institution for many different reasons such as being where she met her children’s father and one of her best friends: Claudia Rodríguez, and for the support so that she could finish her Business Administration studies at Santo Tomás university.

THANK YOU!

for always creating a motivating atmosphere all around the Colombo.
And congratulations on a standout career!

Enjoy this new life stage.